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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,490	04/15/2005	Christophe Fichot	NITROF P61AUS	8718
20210 7590 01/04/2007 DAVIS & BUJOLD, P.L.L.C. 112 PLEASANT STREET CONCORD, NH 03301			EXAMINER PARSLEY, DAVID J	
			ART UNIT	PAPER NUMBER
			3643	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/04/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/531,490	Applicant(s) FICHOT ET AL.	
	Examiner David J. Parsley	Art Unit 3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Amendment

1. This office action is in response to applicant's amendment dated 10-27-06 and this action is final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-17, 27-28 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,133,261 to Kelsey.

Referring to claims 14 and 27, Kelsey discloses an ammunition projectile for a firearm, having diminished penetration into a soft medium, the projectile comprising a nose – at 14,15,17,20,21,22, and a cap – at 12,16, the nose is essentially conical in shape and has a flat leading central portion – at 15,19,24 – see figures 1-2a, and comprises at least two indentations – at 17, disposed essentially symmetrically in relation to one of an axis of the projectile and a respective longitudinal axial plane of the projectile and a longitudinal plane bisecting the projectile along a central longitudinal axis – at 29, – see figures 1-2a, each indentation having a

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curved profile from a first edge to a second edge symmetrical with respect to one of the respective longitudinal axis of the projectile and the respective longitudinal axial plane – see at 17,20,24,25,26 in figures 1-2a, and tapering toward the nose – see figure 1, so that the projectile during trajectory of the projectile through air, is sufficiently slowed so as to diminish penetration of the projectile into a soft medium without significantly altering a trajectory precision of the projectile – see figures 1-2 and column 2 lines 45-63.

Referring to claim 15, Kelsey discloses a base of the indentations is rounded – see at 17,20,24,25,26 in figures 1-2a.

Referring to claim 16, Kelsey discloses the hollow areas are formed of two curvilinear planes whose intersection is defined by a radial ridge – see at 15,24 in figures 1-2a.

Referring to claims 17 and 28, Kelsey discloses the nose comprises a flat central portion – see at 15,19,24 in figures 1-2a.

Referring to claim 33, Kelsey discloses an ammunition projectile for a firearm, having diminished penetration into a soft medium, the projectile comprising a nose – at 14,15,17,20,21,22, and a cap – at 12,16, the nose is essentially conical in shape and has a flat leading central portion – at the centermost portion of 15 – see figures 1-2a, and comprises at least two indentations – at 17, disposed essentially symmetrically in relation to one of an axis of the projectile and a respective longitudinal axial plane of the projectile and a longitudinal plane bisecting the projectile along a central longitudinal axis – at 29, – see figures 1-2a, each indentation having a curved profile from a first edge to a second edge symmetrical with respect to one of the respective longitudinal axis of the projectile and the respective longitudinal axial plane – see at 17,20,24,25,26 in figures 1-2a, and tapering toward the nose – see figure 1, with a

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leading edge of each indentation being spaced from the flat leading central portion – see figures 1-2, where the leading portions of the indentations are spaced from the centermost portion of 15, so that the projectile during trajectory of the projectile through air, is sufficiently slowed so as to diminish penetration of the projectile into a soft medium without significantly altering a trajectory precision of the projectile – see figures 1-2 and column 2 lines 45-63.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18 and 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as applied to claims 17 or 28 above. Kelsey further discloses a diameter of the flat central portion is smaller than the diameter of the projectile at a base of the nose – see figures 1-2a. Kelsey does not disclose a diameter of the flat central portion generally ranges from 10 to 50% of a diameter of the projectile at a base of the nose and preferably from one fourth to one third of the diameter of the projectile. However, applicant does not disclose that the diameter of the flat central portion is from 10 to 50% of the diameter of the projectile at a base of the nose is critical to the operation of the invention. Therefore, it is deemed that the device of Kelsey is capable of operating with the diameter of the flat central portion being from 10 to 50% of the diameter of the projectile at a base of the nose and it would have been obvious to one of ordinary skill in the art to take the

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device of Kelsey and add the diameter of the flat central portion being from 10 to 50% of the diameter of the projectile at a base of the nose, so as to allow for the device to be made more aerodynamic to improve the flight characteristics of the device.

Claims 19-20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as applied to claim 14 above, and further in view of U.S. Patent No. 4,450,769 to Moser.

Referring to claim 19, Kelsey does not disclose the nose and the cap comprise a cavity. Moser does disclose the nose and the cap comprise a cavity – see at 17-19 in the drawing figure. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey and add the cavity in the nose and cap of Moser, so as to allow for the center of gravity of the device to be modified.

Referring to claim 20, Kelsey as modified by Moser further discloses the cavity is designed to receive a blocking means – at 19 and/or 20 – see the drawing figure. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey as modified by Moser and add the blocking member of Moser, so as to allow for the center of gravity of the device to be modified.

Referring to claim 25, Kelsey as modified by Moser further discloses the cavity comprises a central zone – see the interior at 17-19 in the drawing figure, that is at least partially threaded – see at 17, and the blocking means is a bolt – at 19 or 20, partially engaged in the central zone – see the drawing figure of Moser. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey as modified by Moser and add the blocking means of Moser, so as to allow for the center of gravity of the device to be modified.

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Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as applied to claim 14 above, and further in view of U.S. Patent No. 5,259,320 to Brooks.

Referring to claims 21-22, Kelsey does not disclose the projectile is made of a soft metal being copper. Brooks does disclose the projectile is made of copper – see column 6 lines 1-17. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey and add the projectile made of copper of Brooks, so as to allow for the device to be easily manufactured and machined.

Claims 23-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as modified by Moser as applied to claim 20 above. Kelsey as modified by Moser does not disclose the blocking means is made of a hard metal being steel. However, applicant does not disclose that the blocking means being made of steel is critical to the operation of the invention and it is deemed that the device of Kelsey as modified Moser is capable of operating with the blocking means made of steel. Therefore it would have been obvious to one of ordinary skill in the art to take the device Kelsey as modified by Moser and add the blocking means being made of steel, so as to allow for the device to be made more durable.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as applied to claim 14 above, and further in view of U.S. Patent No. 5,385,100 to Corzine et al. Kelsey does not disclose the projectile is made of brass. Corzine et al. does disclose the projectile is made of brass – see column 5 lines 41-50. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey and add the projectile made of brass of Corzine et al., so as to allow for the device to be easily manufactured and made more durable.

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Claims 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as applied to claim 27 above, and further in view of U.S. Patent No. 4,450,769 to Moser.

Referring to claim 30, Kelsey does not disclose the nose and the cap comprise a cavity. Moser does disclose the nose and the cap comprise a cavity – see at 17-19 in the drawing figure. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey and add the cavity in the nose and cap of Moser, so as to allow for the center of gravity of the device to be modified.

Referring to claim 31, Kelsey as modified by Moser further discloses the cavity is designed to receive a blocking means/member – at 19 and/or 20 – see the drawing figure of Moser. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey as modified by Moser and add the blocking member of Moser, so as to allow for the center of gravity of the device to be modified.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as applied to claim 27 above, and further in view of U.S. Patent No. 5,259,320 to Brooks.

Referring to claim 32, Kelsey does not disclose the projectile is made of a soft metal being copper. Brooks does disclose the projectile is made of copper – see column 6 lines 1-17. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey and add the projectile made of copper of Brooks, so as to allow for the device to be easily manufactured and machined.

Response to Arguments

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4. Regarding claims 14-17, the Kelsey reference US 5133261 discloses an ammunition projectile for a firearm, having diminished penetration into a soft medium, the projectile comprising a nose – at 14,15,17,20,21,22, and a cap – at 12,16, the nose is essentially conical in shape and has a flat leading central portion – at 15,19,24 – see figures 1-2a, and comprises at least two indentations – at 17, disposed essentially symmetrically in relation to one of an axis of the projectile and a respective longitudinal axial plane of the projectile and a longitudinal plane bisecting the projectile along a central longitudinal axis – at 29, – see figures 1-2a, each indentation having a curved profile from a first edge to a second edge symmetrical with respect to one of the respective longitudinal axis of the projectile and the respective longitudinal axial plane – see at 17,20,24,25,26 in figures 1-2a, and tapering toward the nose – see figure 1, so that the projectile during trajectory of the projectile through air, is sufficiently slowed so as to diminish penetration of the projectile into a soft medium without significantly altering a trajectory precision of the projectile – see figures 1-2 and column 2 lines 45-63. Applicant argues that the grooves – at 17, are not symmetrical about a plane defined by the axis of the projectile and an uppermost point of the groove. However, these limitations defining the symmetrical plane are not found in the claims and therefore this argument is moot. Further, the Kelsey reference discloses an optimal penetration of the projectile being causing more tissue damage to the target – see column 2 lines 45-63. To cause this tissue damage the ribs – at 20 formed between the indentations allow for more of the surface area of the projectile to engage the tissue of a target. Further, the indentations – at 17, cause trajectory stabilization as seen in column 2 lines 45-63 and further the indentations can be arranged to allow for a slowing of the projectile during flight as seen in column 2 lines 45-63 where it states that the indentations can allow for less

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atmospheric resistance to flight. The term can as seen in line 53 of column 2 indicates that the indentations may or may not allow for less atmospheric resistance to flight of the projectile. Therefore it is deemed that the Kelsey reference discloses the claimed invention. Further, alternatively the limitations of the projectile being sufficiently slowed in the air to diminish penetration into a soft medium are intended use/functional limitations in an apparatus claim and it is deemed that the device of Kelsey is capable of performing these functions depending upon the orientation of the indentations – at 17 and ribs – at 20 on the projectile.

Regarding the rejections using the Moser reference US 4450769 applicant argues that the internal cavity of the present invention has a different function than that of the Moser reference, however this different function is not disclosed in the claim language and therefore this argument is moot.

Regarding the rejections using the Corzine reference US 5385100 applicant argues that the Corzine reference discloses a projectile that causes improved tissue damage unlike applicant's present invention. However, the limitations of how much tissue damage is done is not disclosed in the claim language and thus this argument is moot.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Parsley whose telephone number is (571) 272-6890. The examiner can normally be reached on Monday-Friday from 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


David Parsley
Patent Examiner
Art Unit 3643